

What is Claimed is:

1. A safety switch box for a control switch of a saw machine which comprises a switch platform and a switch member pivotally extended thereon to operate said saw machine in an on and off manner, wherein said safety switch box comprises:

5 a supporting base adapted for resting on said switch platform, wherein said supporting base has a through slot formed thereon for said switch member passing through;

a switch shelter, which has an outer operating side and an inner contacting side, pivotally connected to said supporting base to define a sheltering cavity between said
10 switch shelter and said supporting base for receiving said switch member, wherein said switch shelter is capable of being pivotally folded between an idle position and an operation position; and

means for locking said switch shelter on said supporting base at said idle position, wherein at said operation position, said switch shelter is pivotally folded to a
15 position that said contacting side of said switch shelter is adapted for contacting with said switch member to protectively shelter said switch member within said sheltering cavity in position while said saw machine is operating, and at said idle position, said operation side of said switch shelter is pressed to force said contacting side thereof for pivotally pressing said switch member downward to switch off said saw machine.

20 2. The safety switch box, as recited in claim 1, wherein said supporting base, having a U-shaped cross section, further has a base platform defining said through slot thereon and first and second sidewalls upwardly extended from said base platform to define said sheltering cavity within said base platform, and said first and second sidewalls for retaining said switch member within said sheltering cavity.

25 3. The safety switch box, as recited in claim 2, wherein said switch shelter, having a L-shaped cross section is pivotally connected to said supporting base, wherein said switch shelter further has a side arm downwardly extended from a peripheral edge to overlap with said first sidewall of said supporting base.

4. The safety switch box, as recited in claim 3, wherein said locking means has a locking groove formed on said first sidewalls of said supporting base and at least a corresponding locking protrusion formed on said side arm to engage with said locking groove so as to lock up said switch shelter with said supporting base at said idle position.

5 5. The safety switch box, as recited in claim 4, wherein a peripheral edge of said first sidewall functions as a blocking edge to block said locking protrusion engaging with said locking groove, wherein when said switch shelter is pivotally folded towards said supporting base, said switch shelter is blocked at a position that said locking protrusion is biased against said blocking edge of said first sidewall in such a manner that
10 said operation side of said switch shelter must be pressed to drive said locking protrusion slidably passing said blocking edge to engage with said locking groove while said contacting side of said switch shelter is simultaneously driven for pivotally pressing said switch member downward to switch off said saw machine.

15 6. The safety switch box, as recited in claim 5, wherein said blocking edge of said supporting base is shaped to form a curve notching corner to communicate with said sheltering cavity for operating with said switch member.

7. The safety switch box, as recited in claim 1, wherein said switch shelter further has a thumb cavity formed thereon to form said operating side of said switch shelter having a concave surface and said contacting side of said switch shelter having a
20 corresponding convex surface.

8. The safety switch box, as recited in claim 4, wherein said switch shelter further has a thumb cavity formed thereon to form said operating side of said switch shelter having a concave surface and said contacting side of said switch shelter having a corresponding convex surface.

25 9. The safety switch box, as recited in claim 5, wherein said switch shelter further has a thumb cavity formed thereon to form said operating side of said switch shelter having a concave surface and said contacting side of said switch shelter having a corresponding convex surface.

30 10. The safety switch box, as recited in claim 6, wherein said switch shelter further has a thumb cavity formed thereon to form said operating side of said switch

shelter having a concave surface and said contacting side of said switch shelter having a corresponding convex surface.

11. The safety switch box, as recited in claim 1, wherein said contacting side of said switch shelter has a slanted surface portion arranged for contacting with said switch member so as to substantially push said switch member to switch on said saw machine.

12. The safety switch box, as recited in claim 4, wherein said contacting side of said switch shelter has a slanted surface portion arranged for contacting with said switch member so as to substantially push said switch member to switch on said saw machine.

13. The safety switch box, as recited in claim 6, wherein said contacting side of said switch shelter has a slanted surface portion arranged for contacting with said switch member so as to substantially push said switch member to switch on said saw machine.

14. The safety switch box, as recited in claim 7, wherein said contacting side of said switch shelter has a slanted surface portion arranged for contacting with said switch member so as to substantially push said switch member to switch on said saw machine.

15. The safety switch box, as recited in claim 10, wherein said contacting side of said switch shelter has a slanted surface portion arranged for contacting with said switch member so as to substantially push said switch member to switch on said saw machine.

16. A saw machine, comprising:

a saw blade;

a control switch electrically connected with a motor to drive said saw blade to rotate, wherein said control switch comprises a switch platform and a switch member pivotally extended thereon to operate said motor in an on and off manner; and

a safety switch box, comprising:

a supporting base supported on said switch platform, wherein said supporting base has a through slot formed thereon for said switch member passing through;

5 a switch shelter, which has an outer operating side and an inner contacting side, pivotally connected to said supporting base to define a sheltering cavity between said switch shelter and said supporting base for receiving said switch member, wherein said switch shelter is capable of being pivotally folded between an idle position and an operation position; and

10 means for locking said switch shelter on said supporting base at said idle position, wherein at said operation position, said switch shelter is pivotally folded to a position that said contacting side of said switch shelter is adapted for contacting with said switch member to protectively shelter said switch member within said sheltering cavity in position while said saw machine is operating, and at said idle position, said operation side of said switch shelter is pressed to force said contacting side thereof for pivotally pressing
15 said switch member downward to switch off said saw machine.

17. The saw machine, as recited in claim 16, wherein said supporting base, having a U-shaped cross section, further has a base platform defining said through slot thereon and first and second sidewalls upwardly extended from said base platform to define said sheltering cavity within said base platform, and said first and second sidewalls
20 for retaining said switch member within said sheltering cavity, wherein said switch shelter, having a L-shaped cross section is pivotally connected to said supporting base, wherein said switch shelter further has a side arm downwardly extended from a peripheral edge to overlap with said first sidewall of said supporting base.

18. The saw machine, as recited in claim 17, wherein said locking means has a
25 locking groove formed on said first sidewalls of said supporting base and at least a corresponding locking protrusion formed on said side arm to engage with said locking groove so as to lock up said switch shelter with said supporting base at said idle position.

19. The saw machine, as recited in claim 18, wherein a peripheral edge of said first sidewall functions as a blocking edge to block said locking protrusion engaging with
30 said locking groove, wherein when said switch shelter is pivotally folded towards said

supporting base, said switch shelter is blocked at a position that said locking protrusion is biased against said blocking edge of said first sidewall in such a manner that said operation side of said switch shelter must be pressed to drive said locking protrusion slidably passing said blocking edge to engage with said locking groove while said
5 contacting side of said switch shelter is simultaneously driven for pivotally pressing said switch member downward to switch off said saw machine.

20. The saw machine, as recited in claim 19, wherein said blocking edge of said supporting base is shaped to form a curve notching corner to communicate with said sheltering cavity for operating with said switch member.

10 21. The saw machine, as recited in claim 16, wherein said switch shelter further has a thumb cavity formed thereon to form said operating side of said switch shelter having a concave surface and said contacting side of said switch shelter having a corresponding convex surface.

15 22. The saw machine, as recited in claim 18, wherein said switch shelter further has a thumb cavity formed thereon to form said operating side of said switch shelter having a concave surface and said contacting side of said switch shelter having a corresponding convex surface.

20 23. The saw machine, as recited in claim 20, wherein said switch shelter further has a thumb cavity formed thereon to form said operating side of said switch shelter having a concave surface and said contacting side of said switch shelter having a corresponding convex surface.

24. The saw machine, as recited in claim 16, wherein said contacting side of said switch shelter has a slanted surface portion arranged for contacting with said switch member so as to substantially push said switch member to switch on said saw machine.

25 25. The saw machine, as recited in claim 18, wherein said contacting side of said switch shelter has a slanted surface portion arranged for contacting with said switch member so as to substantially push said switch member to switch on said saw machine.

26. The saw machine, as recited in claim 20, wherein said contacting side of said switch shelter has a slanted surface portion arranged for contacting with said switch member so as to substantially push said switch member to switch on said saw machine.

5 27. The saw machine, as recited in claim 23, wherein said contacting side of said switch shelter has a slanted surface portion arranged for contacting with said switch member so as to substantially push said switch member to switch on said saw machine.